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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/957,459
Filing Date: September 21, 2001
Appellant(s): ROACH ET AL.

Frederick N. Samuels, Esquire, Reg. 34,715
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08/27/2010 appealing from the Office action mailed 05/12/2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-16, 18, 34-39 and 51-59 are rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(**8) Evidence Relied Upon**

5,638,509	Dunply et al.	06-1997
7,117,371 B1	Parthasarathy et al.	10-2006
6,629,109 B1	Koshisaka	09-2003
5,608,865	Midgely et al.	03-1997

Bryan Pfaffenberger, Webster's NEW WORLD, Copyright 2000

Steven R. William, DECLARATON UNDER 37 CFR 1.132

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-16, 18, 34-49 and 51-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 5, recites "capturing the operating file temporally ***proximate*** to the operation on an…" render indefinite because there is no metes and bounds for this language.

Claim 34, in lines 6, recites "....first storage location temporally ***proximate*** to the operation..." render indefinite because there is no metes and bounds for this language.

Claim 54, in line 4, recites "capturing the operating system ***just before or just after*** the operation being performed…" render indefinite because there is no metes and bounds for this language.

Claims 59, in lines 6, recites "…moving the archive file to a first storage device temporally ***proximate*** to the operation being...." render indefinite because there is no metes and bounds for this language.

For the purpose of examination, meaning of "…temporally proximate, just before, or just after" are being interpreted as any time before or any time after the operation being performed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-16, 18 and 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koshisaka (US. Patent No. 6,629,109 B1) in view of Dunphy et al. (US. Patent 5,638,509) and further in view of Parthasarathy et al. (US. Patent No. 7,117,371 B1).

Regarding on claim 1, Koshisaka teaches in computing device, a method for archiving files comprising:

Detecting an instruction by an operating system to perform an operation on an operating file (the file manipulation monitoring section 21 of the file revision management system 2 detects file manipulation which is going to be executed by the application 1 step Si…) (col. 6, lines 32-43); and

Although, Koshisaka does not explicitly teach capturing the operating file temporally proximate to the operation being performed on the operating file, responsive to the detection of the instruction. Koshisaka does not explicitly teach capturing the

operating file temporally proximate to the operation being performed on the operating file, responsive to the detection of the instruction. However, Koshisaka teaches "the file manipulation monitoring section 201 constantly monitors API (Application Program Interface) commands which are outputted by the application 1 to the operating system 3 and thereby detects the file manipulation which is (going to be) executed by the application 1…In the case wherein the file manipulating is "file deletion" ("Yes" in the step S2), the file manipulation monitoring section 21 instructs the processing section 22 to store a "deleted file name" and a corresponding "backup file name" in the deleted file name memory section 23 (step 23). The deleted file name is the name of the file (to be) deleted by the application 1." (col. 6, lines 35-54). This teaches the monitoring program send out the instruction to save the deleted file to the backup memory right at the time the program can execute the delete application. On the other hand, Dunphy also discloses capturing the operating file temporally proximate to the operation being performed on the operating file, responsive to the detection of the instruction (col. 3, lines 50-67 and col. 4, lines 1-10). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include storing the original file in the memory as taught in Koshisaka in order to allow the user to retrieve latter on when needed. Further more, the both of Koshisaka and Dunphy discloses detecting is done by an API and API is not a part of the Operating System. On the other hand, Parthasarathy discloses an API is a part of the Operating System (col. 5, lines 59-61). Since, API in Parthasarathy disclosed as a part of the operating system. Therefore, it would have been obvious to one ordinary skill in

the art at the time of the invention was made to modify the API of as disclosed in Parthasarathy to detect an instruction performing on as file as Koshisaka and Dunphy to generate a backup for later recovery.

Regarding on claim 2, Koshisaka teaches capturing the operating file includes creating an archive file and storing the archive file in a storage location (col. 6, lines 35-45).

Regarding on claim 3, Koshisaka teaches the archive file includes copy of the operating file (col. 6, lines 35-45).

Regarding on claim 4, Koshisaka does not explicitly teach the archive files includes portions of the operating file. However, Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative information…" (col. 4, lines 33-37). This suggests the event log creating entry containing the changes of the file. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 5, Koshisaka does not explicitly teach the archive file includes pointers directed to one or more storage locations, wherein each of the one or more second storage locations contains at least a portion of the operating file. However, Dunphy teaches "a database 14 located in the data storage and protection apparatus 10 retrieves the event log 12 and uses the information contain therein to identify data files that are to be transmitted to a data file backup media 21 for storage. The database also contains a complete history of all data file changes since it stores the event log entries in its history file" (col. 4, lines 41-46). This suggests the database 14 is the second storage having different entries of a file. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught by Dunphy in order to provide the system retrieve and restore partials of the file from the event log in the event of users change their mind.

Regarding on claim 6, Koshisaka does not explicitly teach capturing the file includes saving the archive file prior to the operation being performed on the operating file. However, Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative information…" (col. 4, lines 33-37). This suggests the event log creating entry containing the changes of the file, is the saving the archive file prior the executing the instruction. Therefore, it would have been obvious to one ordinary skill in the art at the

time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 7, Koshisaka does not explicitly teach the file includes saving the archive file subsequent to detecting the instruction to perform the operation. However, Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative information…" (col. 4, lines 33-37). This suggests the event log creating entry containing the changes of the file, is the saving the archive file prior the executing the instruction. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 8, Koshisaka does not explicitly teaches capturing the file includes saving the archive file subsequent to the operation being performed on the operating file. Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative information…" (col. 4, lines 33-37). This suggests the event log creating entry

containing the changes of the file, is the saving the archive file prior the executing the instruction. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 9, Koshisaka teaches the storage location includes a buffer (col. 5, lines 55-65).

Regarding on claim 10, Koshisaka teaches the first storage location includes a storage device (col. 6, lines 32-65).

Regarding on claim 11, Koshisaka teaches the storage device includes at least one of a group comprising a magnetic storage medium, an optical storage medium, and a solid state storage device (col. 6, lines 32-65).

Regarding on claim 12, Koshisaka teaches the storage location includes a directory disposed on said storage device (col. 6, lines 32-65).

Regarding on claim 13, Koshisaka doest not explicitly teach determining whether the operating file has previously been captured prior to capturing the file. However, Dunphy teaches "if a data change is detected, at step 34, the data file monitor 11

extracts data file status activity information from the received communications and uses this data to maintain an event log 12 indicate a history of all presently occurring data file activity on the computer system1…" (col. 3, lines 64-67 to col. 4, lines 1-21). This suggests that the event log 12 storing the file prior the change made to the file. Therefore, would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 14, Koshisaka discloses determining whether the operating file has previously been captured prior to capturing the file (col. 6, lines 32-65).

Regarding on claim 15, Koshisaka teaches the operation causes a change in the operating file (col. 5, lines 32-65).

Regarding to claim 16, Koshisaka discloses an article of manufacture comprising a computer usable medium having computer program code for performing of the method of claim 1 (an storage unit such as memory, an HDD (Hard Disk Drive), etc) (col. 5, lines 60-62).

17. (Cancelled).

Regarding to claim 18, Koshisaka discloses an article manufacture comprising a processor configured to perform the method of claim 1 (an storage unit such as memory, an HDD (Hard Disk Drive), etc) (col. 5, lines 60-62).

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

As to claim 52, Koshisaka discloses the method of claim 2, wherein said capturing step occurs only if a match to a defined condition has been determined (the condition is "file deletion") (col. 6, lines 44-67).

As to claim 53, Koshisaka discloses the method of claim 52, wherein said defined condition includes at least one of determining whether the operating file has previously been archive (after the file saved and file manipulation such as changing the file name which trigger file deletion and backup) (col. 6, lines 5-67) and determining whether the operating file has been selected for protection.

Claim 54 is rejected same reason as claim 1, furthermore, Koshisaka the command is intercepted by the API prior to execute the command (col. 6, lines 32-43).

Regarding on claim 55, Koshisaka teaches the method recited in claim 54, wherein said capturing occurs an instant before (the file manipulation monitoring section 21 of the file revision management system 2 detects file manipulation which is going to executed by the application 1 step Si) (col. 6, lines 32-35) or after the operation is performed on the operating file.

Regarding on claim 56, Koshisaka does not explicitly teach the method recited in claim 54, wherein the operating file is a system file (file system) (col. 10, lines 38-42).

Regarding on claim 57, Koshisaka teaches the method recited in claim 54, wherein the operating file is a user file (user file) (col. 6, lines 5-43).

8. Claims 34-38, 43-49, 51 and 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunphy (US. Patent No. 5,638,509) further in view Koshisaka (US. Patent No. 6,629,109 B1) and further in view of Parthasarathy et al. (US. Patent No. 7,117,371 B1).

Regarding on claim 34, Dunphy teaches in a computing device, a method for archiving files comprising:

Detecting an instruction by an operating system to perform an operation on an operating file (application program resident on the computer system to intercept all communication therebetween) (col. 1, lines 60-61);

Searching the first temporary storage location for the archive file responsive to the occurrence of the fist event (the database 14 located in the data storage and protection apparatus 10 retrieves the event log 2) (col.4, lines 40-42); and

Moving the archive to a second storage location responsive to a second event, the second storage location being a permanent storage location (uses the information contained therein to identify data files that are to be transmitted to data file backup media 21 for storage) (col. 4, lines 43-45).

Dunphy does not explicitly creating an archive file from the operating file and storing the archive file in a temporary first storage location temporally proximate to the operation being performed on the operating file and responsive to detecting the instruction. However, Dunphy teaches "if a data file change is detected, at step 34, the data file monitor 11 extracts data file status and activity information from the received communications an uses this data to maintain an event log 12 that indicates a history of all presently occurring, data file activity on the computer system 1…" (col. 3, lines 49-67 to col. 4, lines 1-21). In addition, Dunphy teaches "the data file monitor 11 creates an entry in event log 2 that identifies the data directory/data file the nature of the change, extent of the data file, the time that is change occurred and any other pertinent administrative information, such as a user identification, that may be pertinent to the operation of the data file storage and protection system 10" (col. 4, lines 33-38). On the

other hand, Koshisaka teaches "the file manipulation monitoring section 201 constantly monitors API (Application Program Interface) commands which are outputted by the application 1 to the operating system 3 and thereby detects the file manipulation which is (going to be) executed by the application 1…In the case wherein the file manipulating is "file deletion" ("Yes" in the step S2), the file manipulation monitoring section 21 instructs the processing section 22 to store a "deleted file name" and a corresponding "backup file name" in the deleted file name memory section 23 (step 23). The deleted file name is the name of the file (to be) deleted by the application 1." (col. 6, lines 35-54). This teaches the monitoring program send out the instruction to save the deleted file to the backup memory right at the time the program can execute the delete application. These functionalities in Koshisaka and the current application are the same. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the teaching of capturing the delete file to the back up memory as taught in Koshisaka in order to allow the user to retrieve latter on when needed. Further more, the both of Koshisaka and Dunphy discloses detecting is done by an API and API is not a part of the Operating System. On the other hand, Parthasarathy discloses an API is a part of the Operating System (col. 5, lines 59-61). Since, API in Parthasarathy disclosed as a part of the operating system. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the API of as disclosed in Parthasarathy to detect an instruction performing on as file as Koshisaka and Dunphy to generate a backup for later recovery.

Regarding on claim 35, Dunphy teaches the method recited in claim 34 wherein storing the archive file includes storing the archive file prior to the operation being performed on the operating file (creating a entry in the event log prior executing) (col. 4, lines 30-38).

Regarding on claim 36, Dunphy teaches the method recited in claim 35 wherein storing the archive file includes storing the archive file prior to the operation being performed on the operating file and subsequent to the operation being performed on the operating file (the entries is created based on the change is made to the file and change is made to the file after the intercepting command) (col. 3, lines 36-67).

Regarding on claim 37, Dunphy teaches the method recited in claim 34 wherein storing the archive file includes storing the archive file subsequent to the operation being performed on the operating file (history file) (col. 4, lines 41-46).

Regarding on claim 38, Dunphy teaches the method recited in claim 34 wherein the first temporary storage location includes a buffer (log) (col. 4, lines 24-34).

Regarding on claim 43, Dunphy teaches the method recited in claim 34 wherein the second storage location is an output buffer (col. 4, lines 40-45).

Regarding on claim 44, Dunphy teaches the method recited in claim 34 further comprising:

after storing the archive file in the first temporary storage location, updating a database to indicate that the archive file is located in the first storage location (col. 4, lines 25-67);

Determine a final destination for the archive file (col. 4, lines 25-67);

Moving the archive file from the first temporary location to an intermediate storage location (col. 4, lines 25-67);

Updating the database to indicate that the archive file are located in the intermediate storage location (col. 4, lines 25-67); and

After moving the archive file to the second storage location, updating the database to indicate that the archive file is located in the second storage location (col. 4, lines 25-67).

Regarding on claim 45, Dunphy teaches the method recited in claim 44 wherein the second location include a personal attached storage device (backup disk 21) (col. 4, lines 42-44).

Regarding on claim 46, Dunphy teaches the method recited in claim 45 wherein the second storage location includes a network attached storage device (the backup device 20 can be collocated with computer system 1 or can be located remote from

computer system 1 and connected thereto via a data communication) (col. 3, lines 30-34).

Regarding on claim 47, Dunphy teaches the method recited in claim 44 wherein the second storage location includes a peer-to-peer storage device (the backup device 20 can be collocated with computer system 1 or can be located remote from computer system 1 and connected thereto via a data communication) (col. 3, lines 30-34).

Regarding on claim 48, Dunphy teaches the method recited in claim 44 wherein the second storage location includes an Internet storage area network (the backup device 20 can be collocated with computer system 1 or can be located remote from computer system 1 and connected thereto via a data communication) (col. 3, lines 30-34).

Regarding to claim 49, Dunply disclose an article of manufacture comprising a computer usable medium having program code for performing the method of claim 44 (backup media 21) (col. 3, lines 22-35).

Claim 50. (Cancelled)

Regarding to claim 51, Dunply discloses an article of manufacture comprising a processor configured to perform the method of claim 44 (backup media 21) (col. 3, lines 22-35).

Regarding on claim 58, Dunphy teaches the method recited in claim 34 wherein the first event is different from said second event (col. 4, lines 24-50).

Regarding on claim 59, Dunphy teaches in a computing device, a method for archiving files comprising:

Detecting an instruction by operating system to perform an operation on an operating file (application program resident on the computer system to intercept all communication therebetween) (col. 1, lines 60-61); and

Storing the archive file in a second storage device (a database 14 located in the storage and protection apparatus 10 retrieves the event log 12 and uses the information contained therein to identify data files that are to be transmitted to a data file backup media 21 for storage) (col. 4, lines 41-44).

Dunphy does not explicitly teach creating an archive file from the operating file and moving the archive file to a first storage device temporally proximate to the operation being performed on the operating file, responsive to detecting the instructions. However, Dunphy teaches "if a data file change is detected, at step 34, the data file monitor 11 extracts data file status and activity information from the received communications an uses this data to maintain an event log 12 that indicates a history of all presently occurring, data file activity on the computer system 1…) (col. 3, lines 49-67 to col. 4, lines 1-21). In addition, Dunphy also teaches "the data file monitor 11 creates an entry in event log 2 that identifies the data directory/data file the nature of the

change, extent of the data file, the time that is change occurred and any other pertinent administrative information, such as a user identification, that may be pertinent to the operation of the data file storage and protection system 10" (col. 4, lines 33-38). This suggests that changed instruction is intercepted and an entry log is created and store in the event log. On the other hand, Koshisaka teaches "the file manipulation monitoring section 201 constantly monitors API (Application Program Interface) commands which are outputted by the application 1 to the operating system 3 and thereby detects the file manipulation which is (going to be) executed by the application 1…In the case wherein the file manipulating is "file deletion" ("Yes" in the step S2), the file manipulation monitoring section 21 instructs the processing section 22 to store a "deleted file name" and a corresponding "backup file name" in the deleted file name memory section 23 (step 23). The deleted file name is the name of the file (to be) deleted by the application 1." (col. 6, lines 35-54). This teaches the monitoring program send out the instruction to save the deleted file to the backup memory right at the time the program can execute the delete application. These functionalities in Koshisaka and the current application are the same. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modifying Dunphy's system to include capturing the delete file to the back up memory as taught in Koshisaka in order to allow the user to retrieve latter on when needed. Further more, the both of Koshisaka and Dunphy discloses detecting is done by an API and API is not a part of the Operating System (col. 5, lines 59-61). On the other hand, Parthasarathy discloses an API is a part of the Operating System. Since, API in Parthasarathy disclosed as a part of the operating

system. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the API of as disclosed in Parthasarathy to detect an instruction performing on as file as Koshisaka and Dunphy to generate a backup for later recovery.

9. Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunphy et al. (US. Patent No. 5,638,509) in view Koshisaka (US. Patent No. 6,629,109 B1) and further in view of Parthasarathy et al. (US. Patent No. 7,117,371 B1) and further in view of Midgely et al. (US. Patent No. 5,608,865).

Regarding on claim 39, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the first event includes message from a timer. However, Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the notification is the message from a timer. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy and Koshisaka and Parthasarathy system to include notification as taught by Midgely in order to notify the user the changes that is about to be made to the file to allow the user to take the next appropriate actions.

Regarding on claim 40, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the first event includes a message from a program resident on the computing device. However, Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the resident program is the agent. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy, Koshisaka and Parthasarathy system to include an agent as taught by Midgely in order to notify the change that is about to be made to the file to allow the user to take the next appropriate actions.

Regarding on claim 41, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the second event includes a message from a timer. However, Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the same concept of notification system. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy, Koshisaka and Parthasarathy system to include an notification system as taught by Midgely in order to notify the user take appropriate actions.

Regarding on claim 42, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the second event includes a message indicating when the second storage location is available. However, Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the same concept of notifying when there is enough space for backup. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy, Koshisaka and Parthasarathy system to include an notification system as taught by Midgely in order to notify the user the space available to store the backup.

(10) Response to Argument

A. Rejections (b) –(c)

Applicant argues "the Official made an incorrect factual finding that the claim term "operating system" was equivalent to the API of Koshisaka. The Official Action improperly relied upon this factual finding as a basis for its obviousness conclusions in all of the rejections. The Office fundamentally misconstrued the scope and meaning of the term API as used in Koshisaka..."

The examiner respectfully disagrees with the above argument. While applicant's evidences such as Bryan Pfaffenberger, Webster's NEW WORLD, Copyright 2000 and

Steven R. William, DECLARATON UNDER 37 CFR 1.132 to distinguish between the Operating System and API are two different and distinct programs; however, examiner also provided the evidence such the “Application Program Interface” is a part of the Operating System. Secondly, regarding to the DECLARATION UNDER 37 CFR 1.132 of Steven R. William and the definition of "Operating System" from Bryan Pfaffenberger, Webster's NEW WORD which is not enough sufficient evidence to distinguish that the "Operating System” is not an “API” by definition, the following is the quotation copy exactly from the applicant's provided evidence "Operating system (OS) A master control program that manages the computer's internal function, such as accepting keyboard input, and the provide a means to control the computer's operations and file system." Clearly, this does not provide any evidence supporting the “Operating system” is not “API” or API is not a part of the "operating system" which the examiner provided the evidence for supporting this.

Furthermore, Examiner equates API as to applicant claimed "operating system" which both are the software programs used in the computer system to perform command which the user requested. In the broadest interpretation of the "API" and "Operating system", they are both are software process. Furthermore, examiner also provide a second reference showing the monitoring process which were disclosed by Dunphy and Parthsarathy to provide a support that API is a part of the operating system (col. 9, lines 60-63) and the detection is possibly by API by Koshisaka. Moreover, in view of the guidance provided by the Supreme Court in *KSR* decision, the a patent claim is prima facie obvious if “some motivation or suggestion to combine the prior art

teachings" can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. See the recent Board decision *EX parte Smith*, -- USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007 (citing *KSR*, 82 USPQ2d at 1396) (available at <http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf>).

Applicant also agues "the Office alleges that Parasarathy that its API is part of its operating system. For this assertion, the Office Action relies of Col. 5, lines 59-61. However, the cited passages of Parasarathy do not search teach that the API and the operating system of Koshisaka are the same."

Examiner respectfully disagrees with the above argument. As recited in the above explanation, Examiner equated the application program interface (API) in functionality equivalent. Furthermore, examiner also introduced evidence as API resided as a part of the operating system as disclosed by Parasarathy, col. 9, lines 60-62. Therefore, the API is equally or a part of the operating system where the operating system included an API. Applicant did not negate such operating system excluding the usage of API.

B. The Rejection of Claims 1-16, 18, 34-49 and 51-59 under 35 U.S.C 112 Second Paragraph.

Applicant argues "With respect to claim 1, the Office Action alleges that there are no metes and bounds for the following language... The quotation does not appear in

claim 1. Nevertheless, it is believed that the Office Action refers to the following language of claim 1 "capturing the operating file temporally proximate to the operating being performed on the operating file..". This language is clear and definite and refers to a capturing operation that occurs, e.g., within the few clock cycles of the detection of the instruction from the operating system. See paragraph [0040]. Accordingly, a person skill in the art reviewing claim 1 in light of the specification can readily identify the metes and bounds of the claim 1. It follows that claim 1 meets the requirement of 35 U.S.C 112 second paragraph."

Examiner respectfully disagrees with the above argument. The claimed called for "capturing the operating file temporally proximate to the operation being performed on the operating file, responsive to the detection of the instructions" which is not the same as applicant explained for example the file will be capture within a few clock cycles of the detection of the instructions. The claimed did not include these language as claimed.

Applicant also argues "with respect to claim 34, the Office Action alleges that there are no metes and bounds for the following claim language..."

Examiner respectfully disagrees with the above argument. Please see the explanation of claim 1.

Applicant also argues “with respect of claim 54, the Office Action alleges that there are no metes and bounds for the following claim language: “capturing the operating system just before or just after the operation being performed…”. The foregoing quote recited by the Office Action does not appear in claim 54. Nevertheless,

it is believed that the Office Action refers to the following language of claim 54 "...capturing the operating file just before or just after the operation being performed on the operating file, responsive to the detection of the instruction..." This language is clear and definite and refers to a capturing operation that occurs, e.g., within a few clock cycles of the instruction from the operating system..."

Examiner respectfully disagrees with the above argument. Please see explanation of claim 1.

C. Rejection of Claims 1-18 and 54-57 under 35 U.S.C 103(a).

Applicant argues "Turning now to the individual rejection, the Office Action rejected claims 1-18 and 54-57 under 35 U.S.C. 103 as unpatentable over Koshisaka in view of Dunphy and further in view of Parthasarathy et al., U.S. Patent No. 7,117,371 B1. This rejection is improper for the reasons set forth above as well as the following. The proposed combination of Koshisaka/Dunphy/Parasarathy does not address all of the claims... Notwithstanding the comments to the contrary in the Office Action, neither Koshisaka nor Dunphy, taken alone or in combination, teach or disclose this detecting step"

Examiner respectfully disagrees with the above argument. Koshisaka discloses the monitoring the application and before execution to a deletion of a file and stored a backup file name and actual file into the backup (col. 6, lines 44-67). The monitoring section is an application program interface to detect instruction. Furthermore, Dunphy also discloses a data storage and protection system 10 intercept communicaiton between program and storage device to extract the file status and stored in the log (col.

3, lines 36-67 to col. 4, lines 1-21). Application program interface according to Parthsarathy resides in the operating system which indicates application program interface is a part of the operating system (col. 9, lines 60-63).

Applicant argues "Koshisaka is not data-centric; that is, it does not teach detection of an instruction by an operating system. Rather, the detect instruction or command in Koshisaka is the API command that is generated by the application, not the operating system. See Exhibit 4, Paragraphs 5, 6 and 7. For example, in Koshisaka, when an API command requesting file detection is output by the application, the command is detected and hooked by the file manipulation monitoring section in the file management system 2. Subsequently, the processing section sends a different API command to the operating system. In other words, the instruction is first detected by the API and hooked. After the instruction is hooked, a different instruction is passed to the operating system, and the original command sent by the API to the operating system is not executed during performance of Koshisaka's revision management system activities. See William declaration, Paragraph 5."

Examiner respectfully disagrees with the above argument. As explained in the Office Action an operating system and an application program interface are programs to perform the intended purpose. The examiner equated the both program are the same due to its functionality.

Applicant argues "Unlike the method of claim 1, Dunphy does not teach detecting an instruction by an operating system. Thus, Dunphy suffers from the same deficiencies as Koshisaka."

Examiner respectfully disagrees with the above argument. Dunphy discloses the detecting programs and extracting the file status to the event log before the actual change to the file (col. 3, lines 36-67 to col. 4, lines 1-21). Dunphy discloses the program which as similar to application program interface (API) which clearly discloses all the possible changes could occur.

Applicant argues "Like Koshisaka and Dunphy, Parasarathy fails to teach detection of an instruction by an operating system. Parasarathy is directed to a system and method for providing security to components or assemblies. Parasarathy simply teaches that a hashing component and a digital signature component may be an application interface that resides as part of an operating system. Parasarathy clearly recognizes the distinct nature of its operating system 135."

Examiner respectfully disagrees with the above argument. Parasarathy indicates API is a part of the operating system in which provide support for the API is a part of the operating system (col. 9, lines 60-63).

D. The rejection of claims 34-38, 43-50, 51 and 58-59.

Applicants argues "as mentioned above in the discussion of the rejection of claims 1-3, 9-12, 15 and 54-57, neither Dunphy, Parasarathy nor Koshisaka, taken

alone or in combination teach or suggest detection of an instruction by an operating system. In addition, neither Dunphy, Parasarathy nor Koshisaka teach storing an archive..."

Examiner respectfully disagrees with the above argument. As previously explained in the B rejection, the Dunphy, Parasarathy and Koshisaka as in combination disclose the detecting the operation by the API and the API is a part of the Operating system.

Applicant also argues "unlike the method of 34, Dunphy does not detect an instruction by an operating system. Dunphy, much like Koshisaka and other references of record, is concerned with communications form the application program themselves. As explained in detail in connection with the discussion of Koshisaka above, the present invention as defined by claim 34 performs file capture and file manipulation based on instruction from the operating system. This is significant advance because it allows file capture before the file operation is performed, for example. Dunphy is limited to addressing files for which an operation that changes the file content but that may corrupt file content such as file open operations or file rename operations...

It is readily apparent that the Office Action erred in factual findings of the differences between the Dunphy/Koshisaka combination and the subject matter of claim 34. In view of this error, the Office Action failed to establish a prima facie case of obviousness as to claim 34-38, 43 and 59."

Examiner respectfully disagrees with the above argument. Both Dunphy and Koshisaka disclose the monitoring program (API) which captures the file before the

changes occur. Just like the explanation in claim 1, the program is similar to operating system. Furthermore, Parasarathy also discloses the API resides as a part of the operating system. In conclusion, the combination of Dunphy, Koshisaka and Parasarathy, would arrive to applicant invention as disclosed in KRS. Moreover, in view of the guidance provided by the Supreme Court in *KSR* decision, the a patent claim is prima facie obvious if "some motivation or suggestion to combine the prior art teachings" can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. See the recent Board decision *EX parte Smith*, -- USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007 (citing *KSR*, 82 USPQ2d at 1396) (available at <http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf>).

i. Claim 44

Applicant argues "with respect to claim 44, it requires that the archive file pass through two storage locations before ending up in permanent (its third storage location). The Office Action cites to column 4, lines 25-67 of Dunphy as teaching the mentioned..."

The examiner respectfully disagrees with the above argument. The event log as recited in the Koshisaka as being equated to the storage locations (col. 4, liens 25-38) and applicant did not distinguish the storages are not event logs.

E. The Rejection of claims 39-42.

Applicant argues "the Office Action rejected claims 39-42 under 35 U.S.C 103 as unpatentable over Dunphy in view of Koshisaka and further in view of Parasarathy and further in view of Midgely et al. U.S. Patent No. 5,608,865 (hereinafter Midgely)..."

Examiner respectfully disagrees with the above argument. The passage as indicated by Midgely provides a notification process which notifies the user in one schedule event (col. 7, lines 59-63). This passage provides support for notification of based on the schedule event which is equivalent wherein the first event includes a message from a timer.

i. Claims 39-40

Applicant argues "claim 39 calls for searching a first storage location for the archive file responsive to receipt of a message from a timer..."

Examiner respectfully disagrees with the above argument. Claim 39 does not call for searching a first storage location for the archive file responsive to receipt of a message from a timer; however, claim called timer for a notification. Midgely discloses a notification process based on the schedule event such as when a client request a file open operation (col. 7, lines 61-64). Such notification is equivalent to the first event include a message from program resident on the computing device.

ii *Claims 41 and 42.*

Applicant agues "regarding claims 41, it calls for moving the archive file to a permanent storage location responsive to a message from a timer. Claim 42 calls for

moving the archive file to a second storage location responsive to a message indicating when the second storage location is available..."

Examiner respectfully disagrees with the above argument. Midgely discloses a notification process based on the schedule event such as when a client request a file open operation (col. 7, lines 61-64). Such notification is equivalent to the second event includes a message indicating when the second storage location is available.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Baoquoc N To/

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